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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,381

04/01/2004

John E. McDowell

A2,130

9371

7590

12/07/2005

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EXAMINER

LIE, ANGELA M

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,381

Applicant(s)

MCDOWELL ET AL.

Examiner

Angela M. Lie

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/1/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

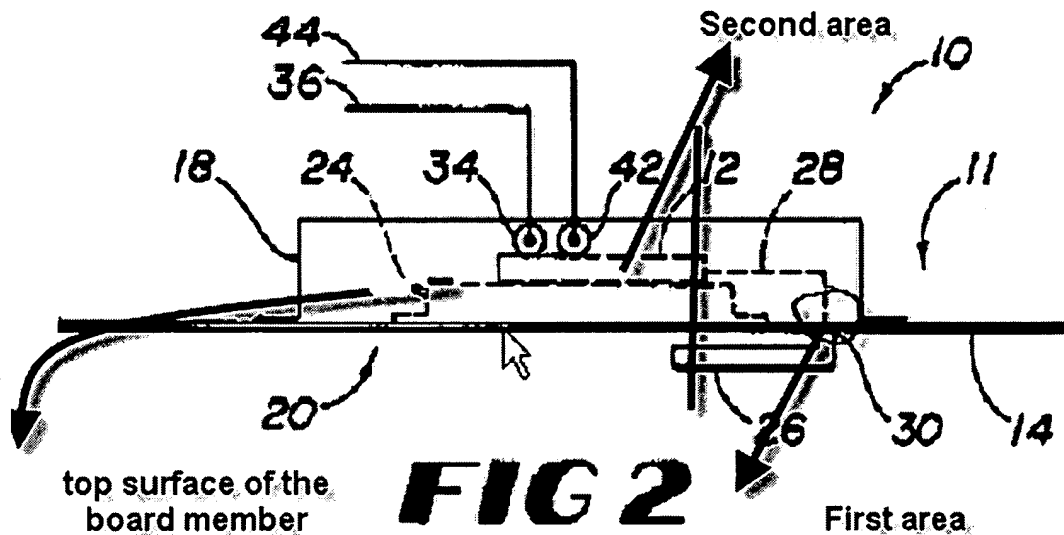
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tucker et al (US Patent 6249671).

As to claim 1, Tucker discloses a mounting system for mounting a radio frequency antenna (Figure 2, element 26) and radio frequency access point (Figure 2, element 12) of a wireless local area network communication system on top of a support surface (Figure 2, element 16b); the mounting system comprising: a freely movably board member (Figure 2, elements 14 and 24) for placement on top of the support surface (Figure 2, element 16b); the board member including a top surface; the top surface having a first area (as indicated in figure 2 below) for receiving the antenna of the wireless local area network communication system (wherein element 28, is considered to be part of the antenna since it connects access point unit and the antenna), and having a second area (as shown in the figure 2 below) for receiving the access point of the wireless local area network communication system (Figure 2, element 12); and a protective cover (Figure 2, element 18) attached to the top surface of the board member for covering the antenna of the wireless local area network

communication system (as it was previously mentioned element 28 is part of antenna and element 18 indeed covers antenna from the top).



As to claim 2, Tucker discloses the mounting system in which the board member has a bottom surface; the bottom surface of the board member is flat (as shown in figure 2, element 14) for laying on top of the support surface (Figure 1, element 16b).

As to claim 3, Tucker discloses the mounting system in which the support surface is a suspended ceiling (Figure 1, element 16b, wherein this element is part of the suspended ceiling); and in which the board member can be freely (since ceiling panel is part of the board member, and it can be freely moved around, therefore it is also capable of performing fine-tuning function, since tuning depends on the location or position of the receiving apparatus), moved around on top of the suspended ceiling to fine-tune the area of coverage of the access point.

As to claim 4, Tucker discloses the mounting system in which the board member (as it was mentioned the board member comprises two parts i.e. element 14 and 24) has a plurality of openings (Figure 3, element 63c and 63d) for allowing the access point transmitter (Figure 3, element 12) to be attached (as shown in the figure 3)

As to claim 5, Tucker discloses the mounting system in which the board member has a plurality of openings (Figure 3, element 63c and 63d) for allowing the access point transmitter to be attached and for allowing wall mounting brackets to be attached (Figure 3, element 54b and 54c).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trucker et al (US Patent 6249671) in the view of Nakashima et al (US Publication 2002/0142149). Trucker teaches the mounting system as disclosed in claim 1, however he does not teach that board member is radio wave transparent. Nakashima teaches a dielectric substrate which has a radio wave transparent property (paragraph 5). It would have been obvious to one of the ordinary skill in the art during the time when the invention was made to make board member as taught by Trucker transparent to radio frequency wave as taught by Nakashima because this would improve the radiation pattern of the

antenna. For instance if there would be a person on second floor (i.e. one floor above the ceiling on which antenna is mounted), with wave transparent substrate the reception should be fairly good.

Allowable Subject Matter

5. Claim 7 is allowed.
6. The following is an examiner's statement of reasons for allowance: the prior art fails to teach a method for mounting and fine-tuning the coverage area of an access point transceiver of wireless local area network communication system on a support surface wherein the antenna's coaxial cabling extends through the protective cover and wherein the method also comprises the step of moving the board member on the support surface to fine-tune the area of coverage of the access point transceiver.
7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - US Publication 2005/0206569 discloses a printed circuit board wireless access point antenna attached to the surface of the suspended ceiling.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Angela M Lie

Primary Examiner
